OMNIA HYBRID-250

MANUAL





www.light-inc.nl

MOVING HEAD

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THANK YOU FOR PURCHASING OUR PRODUCTS

Every unit has been thoroughly tested and has been shipped in perfect operating condition. Carefully check the outer and inner packaging for damage that may have occurred during shipping. If the carton appears to be damaged, carefully inspect your fixture for any damage and be sure all accessories necessary to operate the unit have arrived intact. In case damage has been found or parts are missing, please contact the distributor or your dealer for further instructions. Do not return this unit to your dealer without first contacting them.

1. SAFETY INFORMATION

| 1. SAFETY INI | FORMATION |
|---------------|--|
| \triangle | Before operating this unit, please carefully read this manual and keep for usage in the future. It is necessary to respect the following rules. |
| X | Disposal of the device after its life cycle can damage the environment. Take it to a recycling company or return it to the authorized dealer. |
| () | The products referred to in this manual conform to the guidelines of the European Community and are therefore marked with the CE logo. |
| \triangle | Keep this device away from children and unauthorized users. The dealer is not liable for damage as a result of ignoring the information in this manual and incorrect operation. |
| \triangle | Before operating this unit, please make sure the housing is in good condition and ensure pan and tilt can rotate in full range. |
| ∫ 5 m | Ensure that a minimum distance of 5 m is maintained between the fixture and any flammable material. |
| | The device can only function with 100-240v voltage, 50 / 60Hz power. Do not connect to any other power supply. Disconnect the device from the power supply before opening it or before maintenance. |
| IP20 | For indoor events |
| | Never look directly into the projecting lens when the fixture is switched on. The light can cause epileptic seizures for light-sensitive people or people with epilepsy. Extreme caution and compliance with these safety instructions are required, especially with beam effects. |
| \triangle | Do not place or install the device on a surface that is exposed to vibration or any movement. |
| -15°C +45°C | The device should operate in temperature range -15 °C and + 45 °C. Do not use the device if the temperature exceeds this range. |
| | The lens shield must be replaced if it is broken. Never use the device if the shield is not fully closed. |
| | Safety I class device must be earthed. |
| | When the fixture is mounted overhead, the safety rope must be attached to the correct mounting location on the bottom of the device. |
| \triangle | Please note that damage caused by manual changes to the device is not covered by the warranty. |
| | If a satisfier was released and the state state of the st |



If possible, recycle all packaging material.

2. TECHNICAL INFORMATION

POWER

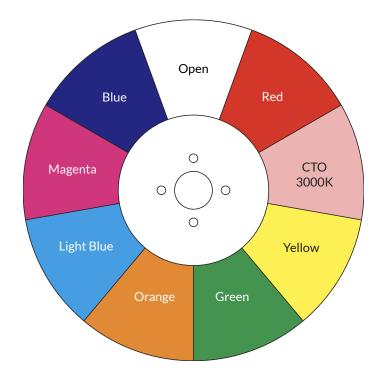
Voltage: Source: Power consumption: CT: Life: AC100~240v,50/60Hz 250W white LED 320W 7200K >20,000H

MOVEMENT

Pan movement: Tilt movement: Advanced motion system: 540° (16 bit) 270° (16 bit) auto repositioning

COLORS

1 color wheel with 8 color + white Indexable, bidirectional infinite color rotation effect

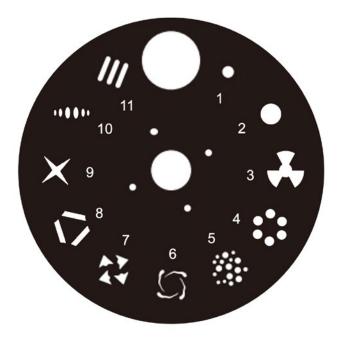


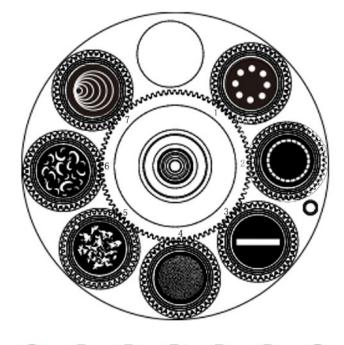
GOBOS

1 Rotating gobo wheel:

1 Fixed gobo wheel:

7 interchangeable gobo's + open, indexable and gobo shaking effect 11 fixed gobo's + open, with gobo shaking effect







| FEATURES | |
|------------------------|---------------------------------|
| DMX channels: | 19/25CH |
| Prism: | 5 facet circular rotating prism |
| Motorized Focus | |
| Motorized zoom: | 2.7°- 45° linear zoom |
| Various strobe | |
| Linear heavy frost | |
| Dimming: | 0-100% linear dimming |
| Isolated signal input | |
| Optional ArtNET contr | ol |
| RDM compatible | |
| Temperature controlle | d cooling system |
| Overheating protection | า |

DISPLAY 2.8 inch LCD display with English/Chinese menu Auto lock and display flip

CONTROL DMX, Auto, Manual

DIMENSIONS AND WEIGHT

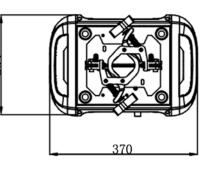
 Dimensions:
 368 × 210 × 597mm

 Packing Dimensions:
 505 × 415 × 620mm

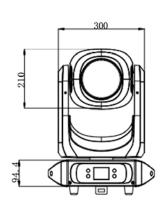
 Net Weight:
 20 KG

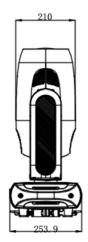
 Gross Weight:
 23 KG

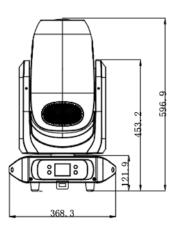
DIMENSIONS

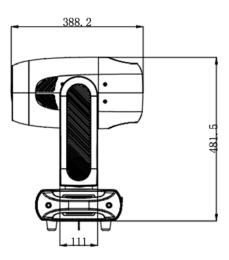


254

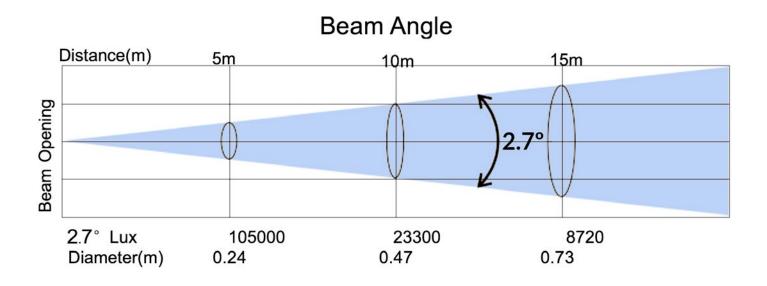




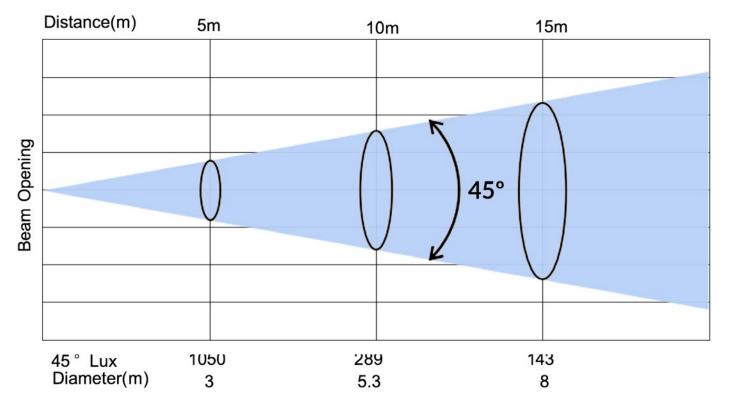




3. PHOTOMETRIC



Beam Angle



4. DISPLAY

Shows the various menu options and selected functions.

Button:

| ENTER | Choose the selected function | | |
|-------|-----------------------------------|--|--|
| DOWN | Move down in the menu | | |
| MENU | To enter into, or leave the menu | | |
| UP | To go back or move up in the menu | | |

ETHERNET: Transfers fixture's information to a main controller. *
DMX input: For DMX 512 operation, use 3/5-pin XLR plug cable to link the units together
DMX output: For DMX 512 operation, use 3/5-pin XLR plug cable to link the units together

5. MENU

Turn on the unit, press the **MENU** button into menu mode, and press the **UP/DOWN** button until the required function is shown on the monitor.

Select the function with the **ENTER** button, use the **UP/DOWN** button to choose the sub-menu, press the **ENTER** button to save and automatically return to the previous menu.

Press the **MENU** button or wait one minute to automatically exit menu mode.

The main functions are shown below:

| | Address | 001 | | |
|-------|---------|----------------|-----------------------|-----------|
| | | 512 | | |
| | | Signal Select | DMX | |
| | | DMX Mode | 19CH | |
| | | | 25CH | |
| | | Slave | | |
| | | Auto | Auto Speed | 000 - 255 |
| | | Sound | Sensitivity | 000 - 255 |
| | Mode | | Pan | 000 - 255 |
| Menu | | Manual Control | Pan Fine | 000 - 255 |
| Meriu | | | Tilt | 000 - 255 |
| | | | Tilt Fine | 000 - 255 |
| | | | Pan / Tilt Speed | 000 - 255 |
| | | | Strobe | 000 - 255 |
| | | | Dimmer | 000 - 255 |
| | | | Zoom | 000 - 255 |
| | | | Focus | 000 - 255 |
| | | | Auto Focus | 000 - 255 |
| | | | Auto Focus Fine | 000 - 255 |
| | | | Colour Wheel | 000 - 255 |
| | | | Rotating Colour Wheel | 000 - 255 |

* Optional

| | | | Detetion Colo Million | 000 055 |
|------|------|------------------|-----------------------|-------------------|
| | | | Rotating Gobo Wheel | 000 - 255 |
| | | | Gobo Rotation | 000 - 255 |
| | | | Fix Gobo Wheel | 000 - 255 |
| | Mode | Manual Control | Prism | 000 - 255 |
| | | | Prism Rotation | 000 - 255 |
| | | | Frost | 000 - 255 |
| | | | Control | 000 - 255 |
| | | | On | |
| | | Display Reverse | Off | |
| | | | Auto | |
| | | | On | |
| | | Display | Off | |
| | | Keylock | On | |
| | | | Off | |
| | | | Celsius | |
| | | Temp Unit | Fahrenheit | |
| | | | Hold | |
| | | DMX Fail | Blackout | |
| | | | Square Law | |
| | | | Inverse Square Law | |
| | | Dimmer Curve | Linear | |
| | | | S Curve | |
| | | | | |
| | | | 800 Hz | |
| | | | 1200 Hz | |
| Menu | | | 3600 Hz | |
| | Set | Dimmer Frequency | 5000 Hz | |
| | | 2 | 10 KHz | |
| | | | 15 KHz | |
| | | | 20 KHz | |
| | | | 25 KHz | |
| | | Dimmer Mode | Standard | |
| | | | TV | |
| | | | Architecture | |
| | | | Theatre | |
| | | Pan Reverse | On | |
| | | r all Kevel se | Off | |
| | | Tilt Reverse | On | |
| | | The Neverse | Off | |
| | | Freedom | On | |
| | | Encoders | Off | |
| | | | Auto | |
| | | Fan Set | High | |
| | | | Silent | |
| | | | | Pan |
| | | Calibrate | | Tilt |
| | | | Password / 8 | Colour Wheel |
| | | | | Rot. Color Wheel |
| | | | | Gobo Rot. |
| | | | | Fix. Colour Wheel |
| | | | | |

| | | | | Zoom | |
|------|------------|------------------|------------------------------------|-------------|--|
| | | Calibrate | Password / 8 | Focus | |
| | | | | Prism | |
| | | | | Prism Rot. | |
| | | | | | |
| | | | | Frost | |
| | | | All | | |
| | | | Pan / Tilt | | |
| | Set | Motor Reset | Color | | |
| | | | Gobo | | |
| | | | Other | | |
| | | | On | | |
| Menu | | Reset Default | Off | | |
| Menu | | Language | Chinese | | |
| | | | English | | |
| | | User Time | Password | | |
| | Ethernet * | Set IP | 000.000.000.000 | 000.000.000 | |
| | | Set Mask IP | 000.000.000.000 | | |
| | | Set Universe | 001-512 | | |
| | | Software Version | V1.00 | | |
| | | | Current Time | | |
| | | Time Info | Total Runtime | | |
| | Info | | LED Runtime | | |
| | | IP Info | 000.000.000.000 000.000.000.000 | | |

6. WIRING CHART

Connect the DMX input (XLR connector) cable of the fixture to the DMX output (female XLR connector) of your controller. You can connect multiple fixtures to this same DMX line in a daisy chain. The DMX cable must be a shielded, twisted pair that is equipped with male and female XLR connectors.

| DMX output 3-pin XLR Socket | DMX input 3-pin XLR Socket | DMX output 5-pin XLR Socket | DMX input 5-pin XLR Socket |
|--------------------------------|-------------------------------|--------------------------------|---|
| | 2 • • 1 1:Ground | | 4 • • 2 5 • • 1 1:Ground 2:Signal(-) |
| | 2:Signal(-) 3:signal(+) | | 3:signal(+) 4: N.A. 5: N.A. |

USING DMX VIA ART-NET *

To control the fixture via ART-NET, the fixtures must be interconnected with a RJ45 cable. Be sure to set all necessary information regarding the ART-NET configuration, with the universe being used and specify in the menu that the fixture is being controlled through ART-NET (see OPTION DETAILS in the « OPTIONS » menu).

OMNIA HYBRID-250 DMX ADDRESS SETTING

All OMNIA HYBRID-250 fixtures must have a DMX start address correctly set when using a DMX signal to control them. The DMX start address is the channel from which the OMNIA HYBRID-250 "listens" to the digital control information sent by the DMX controller.

The start address must conform to the one set on the DMX controller to control the fixture. This address is the DMX value that appears on the fixture's display. You can set the same address for all the fixtures, or some of them, but you can also set a different address for each fixture, as needed.

If you do set the same address for all the fixtures, they will all "listen" from the DMX channel you have set. The instructions sent by the DMX controller will affect all fixtures at the same time. If you set a different address per fixture, the DMX controller can control each independently. If, for instance, the fixtures are preset in 19-channel DMX mode (required for full control), you will need to adjust the DMX address for the luminaires as follows: The first unit with DMX address 001, the second with DMX address 020(19 + 1), the third with DMX address 039 (020+19), etc.

7. DMX CHART

Please refer to below configurations to control the fixtures Attention:

1. The unit will maintain the last condition until reset if you cut off the DMX signal.

2. For the channel function, keep the value for about 5 seconds then the corresponding function will take into effect.

| DMX Mode | | Value | Function | |
|----------|------|---------|----------------------------------|--|
| 19CH | 25CH | value | Function | |
| 4 | 1 | | Pan Movement 8 bit | |
| 1 | | 0-255 | Pan Movement | |
| 2 | 2 | | Pan Fine 16bit | |
| Z | Z | 0-255 | Fine control of Pan movement | |
| 3 | 3 | | Tilt Movement 8bit | |
| 3 | 3 | 0-255 | Tilt Movement | |
| 4 | 4 | | Tilt Fine 16bit | |
| 4 | 4 | 0-255 | Fine control of Tilt movement | |
| 5 | 5 | | Speed Pan/Tilt movement: | |
| 5 | | 0-255 | max to min speed | |
| | | | Shutter, strobe | |
| | | 0-10 | Shutter closed | |
| | | 11-21 | Shutter open | |
| | | 22-126 | Strobe effectslow to fast | |
| 6 | 6 | 127-137 | Shutter open | |
| | | 138-201 | Pulse-effect in sequences | |
| | | 202-212 | Shutter open | |
| | | 213-244 | Random strobe effectslow to fast | |
| | | 245-255 | Shutter open | |

* Optional

| DMX Mode | | | |
|----------|------|---------|--|
| 19CH | 25CH | Value | Function |
| _ | - | | Dimmer intensity: |
| 7 | 7 | 0-255 | Intensity 0 to 100% |
| | 0 | | Dimmer intensity Fine: |
| | 8 | 0-255 | Dimmer intensity fine |
| 8 | 9 | | Zoom: |
| 0 | 7 | 0-255 | Zoom adjustment from small to big |
| | 10 | | Zoom Fine: |
| | | 0-255 | Zoom adjustment Fine |
| 9 | 11 | | Focus: |
| | | 0-255 | Continuous adjustment from near to far |
| | 12 | 0.055 | Focus Fine: |
| 10 | 40 | 0-255 | Continuous adjustment Fine |
| 10 | 13 | | Reserved |
| 11 | 14 | | Reserved Color Wheel: |
| | | 0-19 | |
| | | 20-25 | Open/Red |
| | | 26-31 | Red |
| | | 32-37 | Red/CTO 3000K |
| | | 38-43 | CTO 3000K |
| | | 44-49 | CTO 3000K /Yellow |
| | | 50-55 | Yellow |
| | | 56-61 | Yellow/Green |
| | | 62-67 | Green |
| | | 68-73 | Green/Orange |
| 12 | 15 | 74-79 | Orange |
| | | 80-85 | Orange/Light blue |
| | | 86-91 | Light blue |
| | | 92-97 | Light blue/Magenta |
| | | 98-103 | Magenta |
| | | 104-109 | Magenta/Blue |
| | | 110-115 | Blue |
| | | 116-121 | Blue/Open |
| | | 122-127 | Open |
| | | 128-189 | Forwards rainbow effect from fast to slow |
| | | 190-193 | No rotation |
| | 17 | 194-255 | Backwards rainbow effect from slow to fast |
| | 16 | | Reserved Rotating gobos, cont. rotation |
| | | 0-7 | Open |
| | | 8-20 | Rot. gobo 1 |
| | | 21-33 | Rot. gobo 1 Rot. gobo 2 |
| 13 | 17 | 34-46 | Rot. gobo 3 |
| | | 47-59 | Rot. gobo 4 |
| | | 60-72 | Rot. gobo 5 |
| | | 73-85 | Rot. gobo 6 |
| | | | |

| DMX Mode | | N/L | |
|----------|------|---------|---|
| 19CH | 25CH | Value | Function |
| | | 86-98 | Rot. gobo7 |
| | | 99-111 | Rot. Gobo 1 shake slow to fast |
| | | 112-124 | Rot. Gobo 2 shake slow to fast |
| | | 125-137 | Rot. Gobo 3 shake slow to fast |
| | | 138-150 | Rot. Gobo 4 shake slow to fast |
| 13 | 17 | 151-163 | Rot. Gobo 5 shake slow to fast |
| | | 164-176 | Rot. Gobo 6 shake slow to fast |
| | | 177-189 | Rot. Gobo 7 shake slow to fast |
| | | 190-221 | Gobo wheel rotation forwards from fast to slow |
| | | 222-223 | No rotation |
| | | 224-225 | Gobo wheel rotation backwards from slow to fast |
| | | | Rotating gobo index, rotating gobo rotation 1: |
| | | 0-127 | Gobo indexing |
| 14 | 18 | 128-189 | Forwards gobo rotation from fast to slow |
| | | 190-193 | No rotation |
| | | 194-255 | Backwards gobo rotation from slow to fast |
| | 10 | | Rotating gobo indexing Fine 1: |
| | 19 | 0-255 | Fine indexing |
| | | | Fixed Gobo |
| | | 0-13 | Open |
| | | 14-19 | Beam reducer 1 |
| | | 20-25 | Beam reducer 2 |
| | | 26-31 | Gobo 1 |
| | | 32-37 | Gobo 2 |
| | | 38-43 | Gobo 3 |
| | | 44-49 | Gobo 4 |
| | | 50-55 | Gobo 5 |
| | | 56-61 | Gobo 6 |
| | | 62-67 | Gobo 7 |
| | | 68-73 | Gobo 9 |
| | | 74-79 | Gobo 9 |
| 15 | 20 | 80-89 | Beam reducer 1 shake slow to fast |
| | | 90-99 | Beam reducer 2 shake slow to fast |
| | | 100-109 | Gobo 1 shake slow to fast |
| | | 110-119 | Gobo 2 shake slow to fast |
| | | 120-129 | Gobo 3 shake slow to fast |
| | | 130-139 | Gobo 4 shake slow to fast |
| | | 140-149 | Gobo 5 shake slow to fast |
| | | 150-159 | Gobo 6 shake slow to fast |
| | | 160-169 | Gobo 7 shake slow to fast |
| | | 170-179 | Gobo 8 shake slow to fast |
| | | 180-189 | Gobo 9 shake slow to fast |
| | | 190-221 | Gobo wheel rotation forwards from fast to slow |
| | | 222-223 | No rotation |
| | | 224-255 | Gobo wheel rotation backwards from slow to fast |
| | | | |

| DMX Mode | | | |
|----------|------|--------------------|---|
| 19CH | 25CH | Value | Function |
| | | | Prism |
| 16 | 21 | 0-127 | Open |
| | | 128-255 | Prism |
| | | | Rotating prism index, rotating prism rotation |
| | | 0-127 | Prism indexing |
| 17 | 22 | 128-189 | Forwards prism rotation from fast to slow |
| | | 190-193 | No rotation |
| | | 194-255 | Backwards prism rotation from slow to fast |
| | | | Rotating prism indexing Fine |
| | 23 | 0-255 | Fine indexing |
| 18 | 24 | | Frost |
| 10 | 24 | 0-255 | Open -> Frost |
| | | | Reset, LCD, Fans |
| | | O-9 | unused |
| | | 10-19 | Display Off |
| | | 20-29 | Display On |
| | | 30-39 | Display Invert Off |
| | | 40-49 | Display Invert On |
| | | 50-59 | Auto fan control mode |
| | | 60-69 | High fan control mode |
| | | 70-79 | Silent fan control mode |
| | | 80-82 | Square Law |
| | | 83-85 | Inv SQ Law |
| | | 86-88 | Linear |
| | | 89-91 | S Curve |
| | | 92-94 | 800 Hz Refresh rate |
| | | 95-97 | 1200 Hz Refresh rate |
| | 0.5 | 98-100 | 3600 Hz Refresh rate |
| 19 | 25 | 101-103 | 5000 Hz Refresh rate |
| | | 104-106 | 10 KHz Refresh rate |
| | | 107-109 | 15 KHz Refresh rate |
| | | 110-112 113-115 | 20 KHz Refresh rate 25 KHz Refresh rate |
| | | 113-115 | Standard |
| | | 119-121 | Stage |
| | | 122-124 | TV |
| | | 125-127 | Architecture |
| | | 128-130 | Studio |
| | | 131-149 | unused |
| | | 150-159 | All motor reset |
| | | 160-169 | Pan/Tilt motor reset |
| | | 170-179 | Colors motor reset |
| | | 180-189 | Gobo motor reset |
| | | 190-199 | Other motor reset |
| | | 200-255 | unused |
| | | 200 200 | |

8. ERROR MESSAGES

When you turn on your OMNIA HYBRID-250, it will first perform an automatic reset. The display may show "Err channel is XX" indicating there is a problem with one or more of the channels. "XX" represents channel 1, 2, 3, 4, 5 or 6, which contain the testing sensor for positioning. For example, the message, "Err channel is Pan movement", indicates an error in channel 1. If there is an error on channel 1 and channel 3 at the same time, the following error message may appear: "Err channel is Pan movement". The system will flash twice, and the fixture will generate a second reset. If the error message persists after more than two resets, the channels showing errors will not work properly but the other channels will function normally.

Please contact your authorized dealer or Light-Inc for service and do not attempt to repair the fixture yourself.

PAN-movement Er

(PAN-yoke movement error): This message will appear after the reset if the yoke's magnetic-indexing circuit malfunctions (failed sensor or magnet missing) or the stepping-motor is defective (also caused by its driving IC on the main PCB). The PAN- movement does not return to the default position after the reset.

TILT- movement Er

(TILT- head movement error) This message will appear after the reset of the fixture if the head's magneticindexing circuit malfunctions ((Optical Sensor or Magnetic Sensor fails)) or the stepper motor is defective (or its driving IC on the main PCB). The TILT-movement is not located in the default position after the reset.

Zoom Er

(Zoom error) This message will appear after the reset of the fixture if the head's magnetic-indexing circuit malfunctions (Optical Sensor or Magnetic Sensor fails) or the stepper motor is defective (or its driving IC on the main PCB). The Zoom -movement is not located in the default position after the reset.

Focus Er

(Focus wheel error) This message will appear after the reset of the fixture if the head's magnetic-indexing circuit malfunctions (Optical Sensor or Magnetic Sensor fails) or the stepper motor is defective (or its driving IC on the main PCB). The Focus -movement is not located in the default position after the reset.

Color wheel Er

(Color wheel- error) This message will appear after the reset of the fixture if the head's magnetic-indexing circuit malfunctions (sensor failed or magnet missing) or the steppermotor is defective (or its driving IC on the main PCB). The Color - movement is not located in the default position after the reset.

Rot_Gobo wheel Er

(Rot_Gobo1wheel - error) This message will appear after the reset of the fixture if the head's magnetic-indexing circuit malfunctions (sensor failed or magnet missing) or the steppermotor is defective (or its driving IC on the main PCB). The Rot_Gobo1 - movement is not located in the default position after the reset.

Fix_Gobo wheel Er

(Fix_Gobowheel - error) This message will appear after the reset of the fixture if the head's magnetic-indexing circuit malfunctions (sensor failed or magnet missing) or the steppermotor is defective (or its driving IC on the main PCB). The Fix_Gobo - movement is not located in the default position after the reset.

Prism Er

(Prism error) This message will appear after the reset of the fixture if the head's magnetic-indexing circuit malfunctions (sensor failed or magnet missing) or the steppermotor is defective (or its driving IC on the main PCB). The Prism_5 - movement is not located in the default position after the reset.

Frost Er

(Frost - error) This message will appear after the reset of the fixture if the head's magnetic-indexing circuit malfunctions (sensor failed or magnet missing) or the steppermotor is defective (or its driving IC on the main PCB). The Frost 1 - movement is not located in the default position after the reset.

9. CLEANING AND MAINTENANCE

The following points have to be considered during inspection:

- 1. All screws for installing the devices or parts of the device have to be tightly connected and must not be corroded.
- 2. There must not be any deformations to the housing, lenses, rigging and installation points (ceiling, suspension, truss).
- 3. Motorized parts must not show any signs of wear and must move smoothly without issue.
- 4. The power supply cables must not show any damage, material fatigue or sediment.

Further instructions depending on the installation location and usage have to be adhered to by a qualified installer and any safety concerns have to be removed.

10. NOTES



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ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE

